

## MEMORANDUM

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DATE: June 28, 2000

TO: Participants in the RTO West Market Monitoring Workshop, June 22, 2000

FROM: James F. Wilson

RE: OUTLINE FOR THE MARKET MONITORING WORKSHOP

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Attached is a draft outline for the upcoming workshop. I welcome any comments you might have regarding additional topics to cover, or topics included here that you feel may not need to be addressed at this time. I hope you will use the outline to prepare your thoughts to contribute to the workshop. Your contributions are key to the success of the workshop, and I am planning a considerable amount of time for such discussions.

As you will see from the outline, one of the first tasks will be to identify the types of potential problems that the group is concerned about and that drive the need for monitoring. Many of the other market monitoring issues (organization, governance, scope of authority) depend upon the types of problems the monitoring is most likely to be addressing. Please come prepared to express your views on the potential problems market monitoring will need to focus on in the Northwest region.

You will also notice that the outline steps through the various issues in a fairly comprehensive manner. Some of the listed issues may already have been resolved within your work group or the RRG, and some of the listed alternatives may already have been excluded. Where this is true, we should be able to move quickly and not waste workshop time, however, I do feel that a comprehensive consideration of issues and alternatives is still appropriate at this point in your process. On the other hand, I have not attempted to include every potential alternative in this outline, so do not interpret it as excluding anything.

As we move through the issues, I will present information about FERC Order 2000 and other relevant FERC decisions; the market monitoring plans and practices of other market monitors; and of various problems that have arisen in other markets and how they have been addressed by the market monitors and by FERC. I will generally present such information at the point where it becomes most relevant. This is not reflected throughout the attached outline, however.

The outline includes a final session on market power; types of market power, definition, detection, mitigation, etc. This is a very important area and one that I am prepared to address in detail, however, I do not believe it is necessary to go into this in great detail in order to further define the market monitoring function. Furthermore, I understand that market power issues will

be addressed by each working group (ancillary services, congestion management) in which they arise. It may be that these issues should be addressed in a separate workshop with broader attendance.

I look forward to the workshop and believe it should be a big step forward in identifying the appropriate market monitoring role for RTO West.

**RTO WEST MARKET MONITORING WORKSHOP**

**PORTLAND, OREGON**

**JUNE 22, 2000**

**DRAFT WORKSHOP OUTLINE**

**PRELIMINARIES: REVIEW OF AGENDA AND WORKSHOP PRIORITIES**

- 1) Review workshop program
- 2) Discuss which issues are most important for the working group to decide sooner, which require less attention now
- 3) Discuss, as necessary, how to use the workshop time; priority issues, process

**SESSION 1:**

**MONITORING THE NORTHWEST'S COMPETITIVE ELECTRICITY MARKETS: WHY & WHAT**

*This session addresses the potential for problems in the Northwest's competitive electricity markets, inclusive of all markets; and the potential need for monitoring, regardless of what industry organization or regulatory body might perform it.*

- 1) What problems can arise in competitive electricity markets in general, and in the Northwest markets in particular?
  - a) The objectives of introducing competition, RTO formation, etc.
  - b) What's different about electricity and electricity markets that leads to problems
  - c) The potential threats to the anticipated benefits of restructuring (what are the problems we are trying to address here?)
    - i) Review of Order 2000 and other evidence of FERC, stakeholder views
    - i) Review of types of problems that have occurred in other markets
    - ii) Representative list of potential problems – (workshop participants are to expand this list with additional examples or hypotheticals)
      - (1) Problems with market/service operations
        - (a) Hardware problems, communications problems
        - (b) Software problems resulting in results inconsistent with the tariff
      - (2) Market design flaws or weaknesses that lead to inefficient results

- (a) Artificial limits on participation, inflexible rules, etc.
    - (b) Design weaknesses that provide opportunities for gaming or market power
  - (3) Market power or gaming without causal market design problems
    - (a) Horizontal market power: withholding or marking up bids to raise prices and increase profits
    - (b) Discriminatory treatment; manipulation of transmission or reliability rules by participating transmission owners, control area operators to benefit affiliated entities, etc.
  - (4) Gaming or exercise of market power in markets and services provided by other industry institutions
  - (5) Non-compliance with tariff requirements, rules, procedures
  - (6) Issues around the RTO's performance in various roles
  - (7) Identify issues of particular importance in the Northwest; discuss implications
  - iii) Classify the list of potential problems
  - iv) Discuss the perceived relative importance/likelihood of various types of problems
- 2) What efforts can help to prevent/detect/remedy such problems in a timely and adequate manner?
- a) Collection of information; dissemination of (non-confidential, aggregate) market information. Provide transparency.
  - b) Observation. Detection of phenomena that merit further attention and analysis.
  - c) Analysis. Identify problems, distinguish them from normal market phenomena.
  - d) Recommendations. Determine what, if anything, should be done to address identified problems.
  - e) Implementation. Authority somewhere to take appropriate actions when appropriate.
  - f) The term "monitoring" is used in two senses:
    - i) Observing, analyzing, perhaps suggesting where problems exist and perhaps suggesting changes that should be made;
    - ii) The same, with responsibility (to a regulatory authority) to initiate the process to implement changes or remedies (under the monitor's own authority, or by providing information and/or recommendations to regulatory authorities). Call this *formal monitoring responsibility*.
    - iii) The former can and will be performed to some extent by any interested party; the latter involves a responsibility for monitoring established by regulatory decision.
  - g) The fundamental objectives of market monitoring
    - i) Review of Order 2000 and other evidence of FERC views

- ii) Review of relevant practices of other market monitors
- iii) Candidate fundamental objectives of monitoring: efficiency; competitiveness; low cost to consumers; etc.
- iv) Candidate secondary objectives of monitoring: minimize interference in markets; trust; adaptability; minimize uncertainty; cost effectiveness; etc.

## **SESSION 2:**

### **WHO WILL MONITOR: THE ROLE OF THE REGIONAL TRANSMISSION MARKET MONITOR**

*This session identifies entities that may perform monitoring, and addresses the scope of the RTO market monitor's role (product and geographic markets).*

- 1) Monitoring is needed; who might do it in the Northwest?
  - a) Models for the market monitoring function
    - i) Existing electricity market monitors (US, UK, elsewhere)
    - ii) Gas industry? Securities industry?
  - b) Entities other than FERC and RTO that may perform some monitoring of the markets
    - i) Market participants, their consultants, academics, etc. will watch and analyze.
    - ii) Other industry institutions (PXs, other trading forums, etc.) will naturally concern themselves with the functioning of the services each provides and markets each operates.
    - iii) State regulatory bodies are also responsible and concerned. Level of effort states devote to monitoring will likely depend on level of confidence in FERC/RTO monitoring. Also retail markets.
      - (1) What do states consider necessary regarding wholesale market monitoring?
  - c) FERC is responsible for wholesale markets, is asking RTOs to help out as “first line of defense” in detecting (and to some extent addressing) problems
- 2) What markets/services/regions should the RTO monitor?
  - a) Review of Order 2000 and other evidence of FERC views
    - i) [RTO can establish monitoring as an RTO function or can establish an independent entity to do it; for now, call this monitor the Regional Transmission Market Monitor, RTMM. Organization and governance are addressed in the next session]
  - b) Review of scope of other market monitors
  - c) For what markets/services/regions must the RTMM be *responsible* for monitoring? (Services provided by RTO, markets managed by RTO: Transmission service; FTRs; congestion management; ancillary services; balancing)

- d) What markets/services/regions should the RTMM also monitor, without formal responsibility?
  - i) Order 2000: other markets that affect RTO operations; how RTO operations effect efficiency of markets operated by others
  - ii) Issues: what scope (product and geographic) and how significant a role
  - iii) Reasons for more rather than less monitoring of these other markets:
    - (1) To support effectiveness of primary monitoring responsibility (interdependence of all electricity markets; its difficult or impossible to understand these markets in isolation)
    - (2) If RTO doesn't someone else may have to; who?
    - (3) Problems in other markets may pose risks for RTO: preparedness

### **SESSION 3:**

#### **ORGANIZATION AND GOVERNANCE OF THE MONITORING FUNCTION**

- 1) Candidate objectives of organization and governance:
  - a) Independence from the market; objectivity, fair treatment
  - b) Quality control, consistency with RTO policies
  - c) Degree of independence from RTO management (objectivity with respect to RTO behavior, ability to objectively evaluate RTO's rules and procedures, etc.?)
  - d) Other objectives
  - e) Relative importance of objectives will depend upon the types of monitoring and potential problems that are considered most important (monitoring of participants, of transmission owners, of RTO, etc.)
- 2) Alternatives for organization of the market monitoring function:
  - a) Review of Order 2000 and other evidence of FERC views
  - b) Review of organization of other market monitors.
  - c) RTO staff with other responsibilities also perform monitoring
  - d) Dedicated internal market monitoring unit (MMU)
  - e) MMU with outside expert panel or advisor (standing or ad hoc)
  - f) A market monitoring organization entirely separate from the RTO
  - g) Related functions:
    - i) Separate day-to-day monitoring department, economic analysis department
    - ii) Compliance department (tariff rules, etc.)

- iii) Need for business conduct committee, etc.?
- 3) Relationship of monitor to other entities
  - a) Degree of control over monitor by RTO management; RTO Board. Can the monitor communicate to RTO Board and/or FERC w/o prior RTO management review and approval?
  - b) Appointment and removal of market monitoring staff
  - c) Relationship to other WSCC monitoring organizations
    - i) CA ISO and PX monitors and committees
    - ii) A WSCC-wide entity?

**SESSION 4:**  
**MONITORING TASKS AND PROCESS**

- 1) Day-to-day monitoring: candidate functions
  - a) Review of Order 2000 and other evidence of FERC views
  - b) Review of relevant practices of other market monitors
  - c) Collect information; analyze; identify issues and problems
  - d) Identify and evaluate alternatives, recommend changes to address any market problems
  - e) Evaluate any changes to market design proposed by other departments of the RTO from the perspective of market efficiency and market power
  - f) Monitor for and analyze any market conduct that may be detrimental to RTO objectives (efficiency, competitiveness, no undue market power?)
  - g) Respond to complaints
  - h) Investigate market conduct; how are such investigations initiated?
    - i) by market monitor (basis? approval?)
    - ii) market participant's complaint or request (monitor's discretion?)
    - iii) at request of state regulatory agency
    - iv) at request of FERC.
  - i) Reporting
    - i) Regular reports on market performance and efficiency, problems and opportunities
    - ii) Occasional reports on specific issues and problems as appropriate/requested
    - iii) [issues around confidential information are addressed in a later session]
  - j) Administer local market power mitigation rules

- 2) Monitoring process
  - a) Develop monitoring procedures; develop list of indices to be monitored (stakeholder involvement? transparency?)
  - b) Develop process for any investigations; participant's rights when under investigation (need for this depends upon responsibility to develop recommendations, authority to impose remedies, addressed in next session)
- 3) Compliance with and enforcement of RTO tariff and rules [This may or may not be considered a market monitoring function]

## **SESSION 5:**

### **AUTHORITY OF THE RTO TO ADDRESS PROBLEMS (WITHOUT A FERC FILING)**

- 1) Authority to address RTO market/service problems (design flaws, etc.; not conduct, which is addressed below)
  - a) Review of Order 2000 and other evidence of FERC views
  - b) Review of relevant practices of other market monitors
  - c) Types of problems that could be so categorized (earlier session identified list)
  - d) Types of actions the RTO could potentially be authorized to take (management or Board approval?)
    - i) Short-term quick fixes pending longer term solutions with FERC approval; scope of authority? Circumstances?
    - ii) Recalculating past prices (what circumstances; what limits, etc.)
  - e) Criteria for exercising such authority
- 2) Authority to address problems involving conduct of one or a few market participants
  - a) Types of problems that could be so categorized (earlier session)
  - b) Types of actions RTO could be authorized to take
    - i) "Jawboning"
    - ii) "Demand letters"
    - iii) Referral of the problem and monitor's analysis, with or without recommendation, to:
      - (1) RTO management, Board or appropriate RTO committee
      - (2) appropriate antitrust and/or regulatory agencies
    - iv) Pre-approved authority to impose mitigation?
      - (1) Review of Order 2000, other evidence of FERC views
      - (2) Review of existing authority of other monitors

- (3) Criteria for imposing mitigation (screens, etc.)
  - (a) Principles (material impact, pattern of conduct, etc.)
  - (b) Screens, thresholds
  - (c) Level of discretion to decide whether, what mitigation to impose
  - (d) Type of mitigation: default bids; penalties; etc.
- 3) Special authorities RTO might seek during a limited start-up period to protect against significant harm due to unanticipated problems

**SESSION 6:**

**MONITOR'S ACCESS TO AND DISCLOSURE OF SENSITIVE INFORMATION**

- 1) Monitor's access to sensitive information (participant cost or contract information, etc.)
  - a) Review of Order 2000 and other evidence of FERC views
  - b) Review of relevant practices of other market monitors
  - c) Information RTO and monitor have access to in normal course of business
  - d) Authority to request additional information from participants; criteria, process
  - e) Authority, process to attempt to compel provision of information monitor feels it needs
  - f) Access to sensitive information from adjacent RTOs, other industry institutions (such as PXs) under appropriate arrangements
- 2) Public disclosure of bid data
  - a) Review of Order 2000 and other evidence of FERC views
  - b) Review of relevant practices of other market monitors
  - c) Advantages and disadvantages of release; how rapid, how much, identities, etc.
- 3) Disclosure of information regarding investigations, enforcement actions
- 4) Reports involving sensitive information provided to regulatory authorities
  - a) Authority of state regulators, other government agencies to request such information
  - b) Access of regulatory authorities to bid data without any delay, etc.
- 5) Liability issues raised by monitor's handling and release of sensitive data

**SESSION 7:**  
**MARKET POWER ISSUES**

- 1) Types of market power; definitions
  - a) Horizontal market power: withholding or marking up bids to raise prices
    - i) Local market power due to transmission constraints
    - ii) Market power in peak hours when nearly all capacity is required
    - iii) Gaming vs. market power (definitions)
  - b) “Vertical” market power: typically, manipulation of a regulated service such as transmission to benefit an affiliate in a related, competitive business such as generation
- 2) Approaches to market power analysis in electric power
  - a) FERC traditional approaches for regulatory filings
    - i) These approaches involve structural analyses of hypothetical, not actual, market circumstances (ex ante)
    - ii) Market-based rates filings (section 205)
    - iii) Merger, asset transaction filings (section 203)
    - iv) Relevant product and geographic market definition
    - v) Analysis of competitive conditions
  - b) Market monitors’ approaches to analyzing performance of “going” markets
    - i) Review of most common problems and symptoms
    - ii) Comparisons of actual market results to simulated results (increase in prices relative to those expected under perfectly competitive bidding)
    - iii) Analysis of price differentials between markets, time periods, etc.
    - iv) Monitors also use structural approaches: market shares, HHIs, residual supply quantities, etc.
  - c) Market monitors’ approaches to evaluating market conduct
    - i) Physical and economic withholding (bid markup)
    - ii) Uneconomic production (at one unit, to increase profits elsewhere)
    - iii) Bidding strategies under different system circumstances (constrained and unconstrained hours, etc.)
    - iv) etc.
  - d) What data and indices must monitors watch, what must they analyze or compute?
  - e) Interactions between market design and market power
    - i) How market design shortcomings contribute to market power

- ii) Is some amount of market power necessary for the highest cost resources to recover their fixed costs?
- iii) How can the market monitor distinguish between market power and scarcity as causes for sharp price increases?
- f) Transmission issues (outage coordination, etc.)
- g) Control area issues; seams issues
- h) Issues specific to hydroelectric resources